

REMARKS

Claims 1-15 are pending.

Claims Rejections - 35 U.S.C. § 102

Claims 1 and 7–8 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Asai et al. (US 6,222,980). Claims 2–6 and 9–15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Asai et al.

Applicant respectfully traverses these rejections.

I. Response to Arguments

The Applicant respectfully submits that Response to Arguments section fails to address the Applicants Argument. Specifically, the Office Action fails to address Applicant's arguments regarding claims 2-6 and 9-15 from pages 6-7 of the Response filed on August 2, 2010. Therefore, the Applicants request that another Office Action be issued that fully addresses the Applicant's arguments.

A. Claims 1-12

Claim 1 is directed to a method for method for decoding (extracting) a Linear Time Code (LTC) frame of the type used in connection with film and television and accompanying audio, including in part, detecting a valid synchronization sequence within an incoming LTC frame **while** measuring a predetermined symbol interval relative to a reference clock.

Page 33, lines 22-23 of the present application, specifically describes “[d]etecting a valid bi-phase mark-mark syng sequence while simultaneously measuring the current frame's half-symbol interval.” As noted on pages 2, lines 18-23 and page 14, lines 8-10 of the present application, the method enables a completely digital implementation capable of operating with a high-speed clock that can be asynchronous to an LTC bit symbol rate. This removes the current difficulty of designing a voltage-controlled oscillator (VOC) that works over the wide input reference range required for LTC receivers having an analog Phase Lock Loop (PLL).

As previously noted by the Applicant, Asai deals with pulse widths, or symbol intervals, separately from the detection of a synchronization sequence. Asai specifically requires that the pulse width be addressed prior to the synchronization symbol because Asai uses the pulse width to determine the value of each bit. *See*, Asai column 11, lines 59-65 and Fig. 9, blocks 303-309.

Asai needs the previously determined pulse width information in order to determine where the sync word begins and ends. *See*, Asai Fig. 10 blocks 315-335. Asai specifically illustrates that the step of measuring the pulse width occurs in steps 302 and 304 prior to blocks 312 and 324 dealing with sync words.

In the Response to Arguments, the Office Action merely states “Examiner disagrees with the Applicant because Asai teaches this limitation (col. 7, lines 1-22 and 40-65).” The Office Action does not address the Applicant’s previous remarks that Asai specifically illustrates the pulse width being measured prior to dealing with sync words. Further, the Office Action fails to address that Asai requires the finished pulse width measurement in order to determine where the sync word begins and ends. The Applicant requests that the Examiner address these features of Asai that are incompatible with the method of claim 1.

Further, column 7, lines 1-22 merely describe the basic aspects of a standard LTC signal, and column 7, lines 40-65 describes where Asai finds pulse width information in response to a direction signal. Asai obtains the direction signal from direct knowledge of the tape movement. Asai has no need for a synchronization signal at that time, and does not described anything regarding detecting a valid synchronization sequence **while** measuring such pulse width information, as required by claim 1. As previously noted, Asai deals with its pulse width measurements in a manner that is completely separate from any consideration of synchronization.

Therefore, Asai fails to disclose or suggest a method for method for decoding (extracting) a Linear Time Code (LTC) frame of the type used in connection with film and television and accompanying audio, including in part, detecting a valid synchronization sequence within an incoming LTC frame **while** measuring a predetermined symbol interval relative to a reference clock, as in claim 1.

Thus, claim 1 is allowable over the cited art. For similar reasons, the Applicants submit that claim 8 is likewise allowable. As claims 1 and 8 are allowable, the Applicants submit that claims 2-7 and 9-12, which depend from allowable claims 1 and 8 are therefore also allowable for at least the above noted reason and for the additional subject matter recited therein.

B. Claims 13-15

Claim 13 is directed to a LTC receiver for decoding a Linear Time Code (LTC) frame of the type used in connection with film and television and accompanying audio, comprising

- a first counter for measuring a predetermined symbol interval relative to a reference clock;
- a second counter for counting sync pulses within the incoming LTC frame;
- a third counter for counting data symbols within the incoming LTC frame;
- a shift register and
- a state machine responsive to the counts of the first, second and third counters for (a) detecting a valid synchronization sequence within an incoming LTC frame, (b) determining a LTC frame direction; (c) decoding payload information from the LTC frame; and (d) for transferring the payload information to the shift register in an order determined by the LTC frame direction.

The Office Action asserts that the claimed LTC receiver is obvious in view of Asai. However, the Office Action does not cite Asai as disclosing a single claimed component of the LTC receiver. Instead, the Office Action states that the apparatus of Asai performs a similar method and asserts that it would have been obvious for one of skill in the art to modify Asai to include the claimed first counter, second counter, third counter, and state machine.

In the response filed on August 2, 2010, the Applicants remarked that these features have no place in Asai. For example, rather than using a counter, Asai determines pulse widths by taking a difference between two time values. (*See* Col. 11, lines 50-58.) Asai has no need for a counter to perform such a task and, as such, neither discloses nor suggests a first counter for measuring a predetermined symbol interval.

Furthermore, even if Asai disclosed or suggested the individual features of applicant's claim, the claim recites that *the state machine is responsive to the three counters*. This relationship constitutes a claim feature for which the examiner must take account. The examiner cannot simply find a state machine and three counters in the prior art. Rather, claim 13 defines a specific relationship between these structures neither disclosed nor suggested in the art.

As noted above, the Final Office Action dated November 2, 2010, fails to address the Applicants previous arguments regarding claims 13-15. Therefore, the Applicants request that another Office Action be issued that fully addresses the Applicant's arguments.

In general, the rationale proffered to modify Asai is to achieve benefits identified in Applicants' specification to overcome problems associated with conventional methods. This is an unacceptable and improper basis for a rejection under 35 USC § 103. The Examiner has not provided any evidence or rationale of how the prior art suggests such a combination. In essence,

the Examiner is basing the rejection on the assertion that it would have been obvious to do something not suggested in the art because so doing would provide advantages stated in Applicants' specification. This sort of rationale has been condemned by the Court of Appeals for the Federal Circuit.¹ MPEP § 214.01(III) clarifies that hindsight is an impermissible reason for suggesting modifications of prior art references. The Applicant notes that the Office Action merely includes bare assertions regarding the knowledge of those skilled in the art rather than a citation of a reference dated prior to the time of invention that actually teaches such features. Therefore, the Applicants request that the Examiner cite support for the bare assertion that the modifications required for claims 2-6 and 9-15 would have been obvious.

For at least the above noted combination of reasons, the Applicant submits that claim 13 is allowable over the cited art. As claim 13 is allowable, the Applicant submits that claims 14-15, which depend from allowable claim 13, are therefore also allowable for at least the above noted reasons and for the additional subject matter recited therein.


¹ See, e.g., *Panduit Corp. v. Dennison Manufacturing Co.*, 810 F.2d 1561, 1574-1575 (Fed. Cir. 1987).

CONCLUSION

In view of the foregoing, Applicants submit that claims 1-15 in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

In the event that any fees are due with respect to this paper, please charge Deposit Account No. 01-2300, referencing Atty. Docket No. 033163-00920.

Respectfully submitted,


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